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23593 ZITO TLP P.O. BOX 240 DAMASCUS, MD 20872	7590 06/25/2008		EXAMINER TSUI, WILSON W	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/869,799

Applicant(s)

ROH, YOUNG HOON

Examiner

WILSON TSUI

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No./Mail Date: _____

DETAILED ACTION

1. This action is in response to the application filed on: 01/24/2002.
2. Claims 1-12 are pending. Claims 1, 3, 6, 8, and 11 are independent claims.

Specification

3. The specification is objected to since it is missing/incomplete. See below for the items needed for the specification.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

Art Unit: 2178

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR

1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Drawings

4. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete/missing. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement

Art Unit: 2178

sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Priority

5. Acknowledgment is made of applicant's claim for foreign priority (Korean 199-235, and PCT/KR99/00838) under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/869799, filed on 07/05/2001.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 3, 4, 5, 8, 9, and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regards to claim 3, the claimed "Caption MP3 data format" appears to be a 'Computer program per se' without including hardware. Since the computer program is

Art Unit: 2178

not embodied in a computer readable medium, it is not statutory. See MPEP 2106 below:

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held non statutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and thus statutory.

With regards to claims 4 and 5, they are rejected for similar reason as claim 3 above (since they do not resolve the statutory issue of independent claim 3).

With regards to claim 8, the claimed "Caption MP3 data format each caption MP3 file comprises audio information and corresponding caption information, the audio information having a standard MP3 file format including a header, audio data, and auxiliary data; and the audio information is located before the caption information in

each caption MP3 file, the caption information having caption display time data for indicating a caption display time on a display when the caption information is reproduced." appears to be to be non-functional descriptive material stored on a computer readable medium. A claim must not be directed merely as "non-functional descriptive material stored on a computer readable medium", but must instead be either "a series of steps to be performed on a computer", or, "a machine or manufacturer for performing a process.

With regards to claims 9 and 10, they are rejected for similar reason as claim 8 above since they do not resolve the statutory issue of claim 8.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1 and 3-7 are rejected under 35 U.S.C. 102a) as being anticipated by Nilsson ("id3v2-00 Informal Standard, published: March 1998, pages 1-46).

With regards to claim 1, Nilsson teaches *a caption MP3 player for reproducing a caption MP3 information including audio information having a standard MP3 file format comprising a header, audio data, and auxiliary data, and corresponding caption information* (page 1, whereas field data is stored after the audio portion of the file, the

field data including header data (page 4), and auxiliary data (page 25, 26: whereas caption/text data is auxiliary data)) *having position data and/or time data for the caption information* (page 25, page 26: whereas time data stamp format, is implemented) the caption MP3 player (page 26: whereas the mp3 player plays audio and displays text) comprising:

A storage means for storing the inputted audio information and corresponding caption information (page 1: whereas, audio information is stored in a file);

A signal separation means for separating the audio information and caption information provided from the storage means (page 1: whereas audio is stored first, and then caption information is placed at end of file);

A control means for controlling storage and output of the information through the storage means and controlling synchronization of the audio information and the caption information separated by the signal separation means (page 25, 26: whereas, synchronization of audio and caption is implemented).

A caption output means for receiving an output of the signal separation means, and outputting the caption information synchronized with the audio information which corresponds to the caption signal and is outputted from the audio output means (page 25, 26: whereas caption is synchronized with reproduced audio output).

With regards to claim 3, for a MP3 data format that is similar to the method performed by the caption player of claim 1, is rejected under similar rationale.

With regards to claim 4, which depends on claim 3, Nilsson teaches *wherein the caption information comprises an initiation section indicating initiation of the caption*

information and an information section, the position data is a reproduction number data indicating to which frame of the reproduced audio information the caption information corresponds, and the reproduction number data is included in the information section (page 25, 26: whereas, the caption information includes an initiation section indicated by the Synced lyrics/text 'SLT', and frame size information section with time frame number data for which the caption sync-ing corresponds.)

With regards to claim 5, which depends on claim 3, Nilsson teaches *wherein the information section comprises: a reproduction address data for indicating a reproduction address that combines the caption information with each other if a plurality of pieces of caption information form one word or picture* (P31: whereas, caption information forms a picture and captions/text); *an information identification code for indicating a kind of files form of a stored information* (P31: whereas, the Image format code indicates the kind of file(s)); *a selection code for indicating at least one of a language form used in the stored information* (P31: whereas, language/format form used to describe a picture file is indicated, such as JPG), *operation time and display mode* (as similarly explained in the rejection for claim 4, operation/position time data is implemented through a sync-display-mode); *and caption data including caption characters* (page 25, 26, and page 31: whereas caption/description includes characters).

With regards to claim 6, Nilsson teaches an MP3 reproduction method for controlling output of audio information and/or *caption information from a recording medium, the method comprising the steps of:*

Determining whether only audio information exists among the information stored in the recording medium; outputting the audio information from the recording medium if it is determined that only the audio information exists (page 3: whereas it is determined whether just audio exists in a recording medium, and only output audio of no caption exists);

Reproducing the audio information in synchronism with the caption information if it is determined that both the audio information and the caption information exist (page 3: whereas, audio is synchronized with audio), and repeatedly reproducing next audio and caption information (pages 25, 26, 27: whereas the audio and caption information continue for each time stamp specified).

With regards to claim 7, which depends on claim 6, Nilsson teaches wherein the reproducing step comprises the steps of firstly determining whether the caption information and the audio information exist together in the recording medium (page 26, 27: whereas, the steps are reproduced for each specified time); outputting the caption information if the first determining step determines that the caption information exists but the audio information does not exist (page 25: whereas, unsynchronized text is determined to exist, and outputted even if there is no audio sync data); decoding the audio information if the caption information and the audio information exist together at the first determining step (page 25, 26: whereas, audio and caption information exist together, and audio decoded/played); secondly determining whether the caption information corresponding to the audio information exists; outputting for the next caption information or blank caption information if the second determining step determines that

the corresponding caption information does not exist; interpreting information according to a form of a file comprising the caption information if the second determining step determines that the corresponding caption information does not exist (Page 25, 26, 27: whereas, if caption information doesn't exist for a specified time, the file comprising caption data is processed again/interpreted-further), and restarting the first determining step to output the corresponding caption information by synchronizing the caption information with the decoded audio information and to output the next caption information (page 25, 26, 27: process is restarted for duration of sync-ing).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson ("id3v2-00 Informal Standard, published: March 1998, pages 1-46), in further view of Rio ("Rio PMP 300 User's Guide", published: 1998, pages 1-23).

With regards to claim 2, which depends on claim 1, Nilsson teaches a MP3 player, but does not expressly teach the *caption output means is a liquid crystal display*. Yet, Rio teaches the *caption output means is a liquid crystal display* (page 12: whereas

a liquid crystal display is shown, displaying metadata/caption output for mp3 play status).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Nilsson's MP3 player, such that the MP3 player would have had caption output ability through a liquid crystal display, as similarly taught by Rio. The combination of Nilsson and Rio would have allowed Nilsson to have "indicated its current mode and status, along with additional information" (Rio, page 12).

With regards to claim 8, Nilsson teaches *each caption MP3 file comprises audio information and corresponding caption information the audio information having a standard MP3 file format including a header, audio data, and auxiliary data*, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.

Additionally, Nilsson teaches *the audio information is located before the caption information in each caption MP3 file* (Page 1: whereas caption information is located after audio information),

However, although Nilsson teaches *the caption information ... when the caption information is reproduced* (the caption information having time data, and the caption is reproduced via synching), as similarly explained in the rejection for claim 1, Nilsson does not expressly teach that the caption information *having caption display time data for indicating a caption display time on a display when the caption information is reproduced*.

Yet, Rio teaches the caption information *having caption display time data for indicating a caption display time on a display* (page 12: whereas, display time data is indicated in a display).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Nilsson's caption time data, such that it is displayed when the caption is reproduced, as taught by Rio. The combination would have allowed Nilsson to have "indicated its current mode and status, along with additional information" (Rio, page 12).

With regards to claim 9, which depends on claim 8, Nilsson teaches *a caption start synchronization signal for indicating a start position at which the caption information is located* (as similarly explained by the initiation section in the rejection for claim 4, and is rejected under similar rationale); *a plurality of pieces of caption information having character information to be displayed on display; a text type for determining an output type of the character information; and a caption identification code* (pages 25, 26, and 27: whereas caption data/text, and text type/encoding are included as caption identification data/code).

Additionally, as explained in the rejection for claim 8 above, Nilsson and Rio similarly teach *wherein the caption display time data is included in each of the plurality of caption data and is compared with a play time counted when the caption MP3 file is reproduced* (whereas, the display time is based off/compared/sync-ed to the counted

time when the MP3 file is reproduced)), as similarly explained in the rejection for claim 8, and is rejected under similar rationale.

With regards to claim 11, Nilsson teaches *caption MP3 data comprising audio information having a standard MP3 file format comprising a header, audio data and auxiliary data, and corresponding caption information* (as similarly explained in the rejection for claim 3, and is rejected under similar rationale.) the method comprising the steps of *identifying step for identifying whether the caption information exists in the caption MP3 data to be reproduced* (as similarly explained in the rejection for claim 7, and is rejected under similar rationale); *reproducing the audio information if it is determined that the caption information does not exist at the caption information identifying step* (as similarly explained in the rejection for claim 6, and is rejected under similar rationale), *initializing the caption information if it is determined that the caption information exists at the caption information identifying step* (as similarly explained in the rejection for claim 7, and is rejected under similar rationale);

Additionally, Nilsson and Rio teach *bringing a play time while reproducing the caption MP3 files; comparing the play time with a display time of the caption information* (as similarly explained in the rejection for claim 9, and is rejected under similar rationale); Furthermore, Rio teaches *bringing the display time of next caption information; and displaying the caption information* (page 12: whereas, a repeat/loop mode is implemented).

With regards to claim 12, which depends on claim 11, Nilsson and Rio teach displaying caption information, as similarly explained in the rejection for claim 8 above. Furthermore, Rio's playing/decoding of audio and caption data, includes *determining termination of reproduction after the audio information reproducing step; and returning to the termination of reproduction determining step after the caption information displaying step* (page 12: whereas a pause function is implemented)

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson ("id3v2-00 Informal Standard, published: March 1998, pages 1-46), in further view of Rio ("Rio PMP 300 User's Guide", published: 1998, pages 1-23), and further in view of Matz et al (US Patent: 6,198,511 B1, issued: Mar. 6, 2001, filed: Sep. 10, 1998).

With regards to claim 10, which depends on claim 9, Nilsson teaches *wherein each of the caption data comprises a sentence start identification code for indicating a beginning of characters presented by the caption data* (pages 25, 26, 27: whereas sentence/text data includes start code, based upon 'SLT' identifier/marker); *a caption section comprising the character data to be displayed on the display* (pages 25, 26, and 27: whereas content descriptor/caption-section is displayed on display); *and characterized containing length information of the caption data* (pages 25, 26, and 27: whereas, frame length is included with caption data).

However, Nilsson does not expressly teach *additional data includes containing a scroll type and flash information*.

Yet, Matz et al teaches caption data *containing a scroll type and flash information* (Fig 3, column 2, lines 56-67: whereas caption data includes scroll type data, and also as explained in column 3, lines 23-37: whereas flash event data/information is implemented).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Nilsson and Rio's audio and caption data, such that scroll type and flash information/data are also included, as taught by Matz et al. The combination of Nilsson, Rio, and Matz et al would have allowed Nilsson to have "parsed caption script/data" (Matz et al, column 2, lines 5-9).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILSON TSUI whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CESAR B PAULA/
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/Wilson Tsui/
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June 21, 2008